

**CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM
STATEMENT OF INVESTMENT POLICY**

**FOR
LEVERAGE**

April 17, 2009

This policy is effective upon adoption.

I. PURPOSE

The CalPERS Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), sets forth CalPERS' overarching investment purposes and objectives with respect to all its investment programs.

The use of financial leverage magnifies investment returns, both positively and negatively, and could increase the volatility of returns. Market illiquidity may substantially increase the risk of a leveraged investment particularly under certain crisis scenarios. Leverage needs to be managed prudently and within specified limits.

The purpose of the Leverage Policy ("Policy") is to set forth a framework for comprehensively identifying, measuring, managing, and reporting various forms of leverage. It requires that the Asset Allocation/Risk Management unit report on leverage to the Committee. The Policy also specifies limits on forms of leverage not included in existing policies and requires that leverage be aggregated when reporting at the Total Fund.

II. STRATEGIC OBJECTIVE

The Policy is intended to set limits and standards on the use of leverage that reasonably balance investment flexibility with risk management. Consistent measurement and periodic reporting of leverage as directed in this Policy should enable CalPERS to employ leverage in the programs and time periods when the expected return to risk tradeoff is most attractive.

The Policy is also intended to result in greater consistency across investment units, and in greater ability of the Committee to direct policies concerning leverage. A Fund-wide Policy should also better account for the effect that leverage may have on debt costs and in the ability to maintain asset class weights within policy ranges.

III. RESPONSIBILITIES

A. CalPERS' Investment Staff ("Staff") is responsible for the following:

1. Staff in each asset class unit are responsible for monitoring leverage, complying with policies, and reporting quarterly to the Risk Management unit, regarding actual leverage for the programs that the asset class unit manages. The Asset Allocation/Risk Management unit is responsible for leverage policy development and monitoring and reporting leverage aggregated at the Total Fund level.
2. Monitoring the implementation of, and compliance with, the Policy. Staff shall report concerns, problems, material changes, and all violations of the Policy at the next Committee meeting, or sooner if deemed necessary. These reports shall include explanations of the violations and appropriate recommendations for corrective action.
3. The Asset Allocation/Risk Management unit shall report quarterly to the Committee on:
 - a. Recent estimates by asset class on recourse debt, non-recourse debt, and notional leverage. Leverage for the Currency, Credit Enhancement, and Securities Lending programs shall be reported separately from asset class leverage.
 - b. The amount of debt previously classified as recourse that CalPERS paid in the prior year.

B. The General Pension Consultant ("Consultant") is responsible for evaluating the Policy.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

Not applicable.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Prohibitions

1. Use of leverage is prohibited unless expressly permitted in the relevant asset class or program policy.

2. Direct debt, except for unsettled loss positions on non-exchange traded contracts, is prohibited unless authorized by the Committee for a defined purpose.

B. Guidelines

1. All Forms of Leverage

- a. The Policy applies to all CalPERS investments.
- b. In determining the appropriate amount of leverage where permitted, Staff shall consider relevant factors such as the expected incremental return and risk, debt service coverage ratio, stability and certainty of cash flows, and liquidity.
- c. A capital commitment does not represent leverage or direct debt.

2. Non-recourse Debt

- a. Policies for Private Real Estate, Infrastructure, and Forestland shall include limits on the use of non-recourse debt.
- b. The amount of non-recourse debt shall be measured by the debt to market value ratio of the asset, or by the debt to cost ratio if obtaining an approximate market value is not feasible as determined by the Staff responsible for the investment.
- c. The policies of Global Equity (public market equity) and AIM (private equity) shall address the management of leverage as a risk factor, and specify limits as appropriate.

3. Recourse Debt

- a. Since recourse debt is a call on capital of the CalPERS Total Fund, the use of recourse debt may be permitted as an exceptional case if approved in the relevant program policy.
- b. Any policy that permits the use of recourse debt shall include the following terms:
 - (1) a limit on the amount of recourse debt;
 - (2) diversification requirements on the assets with recourse debt; and,

- (3) due diligence standards on the assets with recourse debt.
 - c. Recourse debt is prohibited for investments in Risk Managed Absolute Return Strategies ("RMARS") or other programs that do not have complete transparency on all investment positions. The maximum potential loss on these positions shall be the amount of investment.
4. Notional Leverage
- a. Notional leverage results in exposure to non-cash-like securities that exceeds the value of the capital employed. It is created primarily through the use of derivative instruments or reinvestment of cash collateral of lent securities.
 - b. Examples of notional leverage include the following:
 - (1) A strategy involving long positions in equity futures and investment of the collateral in non-cash-like securities; and,
 - (2) A securities lending program in which the cash collateral is invested in non-cash-like securities.
 - c. Except for the RMARS program, any program policy that permits the use of notional leverage shall include risk management guidelines and a limit on the amount of notional leverage.
 - d. The use of currency swaps does not result in notional leverage because the swaps merely convert exposure from one currency to another.
 - e. For any program or asset class, the amount payable on over-the-counter financial contracts may not exceed \$500 million at any time unless the value of the debt in excess of \$500 million is secured by an equivalent value of dedicated cash-like securities, except for brief periods as a result of extreme market volatility.
 - f. Calculation of net exposure requires access to information on portfolio investments. For RMARS investments and other strategies for which this information is unavailable, net exposure shall be measured as the estimated global equity

beta. A program equity beta in excess of 100%, inclusive of dedicated cash-like securities, represents notional leverage.

VI. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis as recorded by CalPERS' Custodian.

VII. GLOSSARY OF TERMS

Key words used in this Policy are defined in CalPERS' Master Glossary of Terms.

Approved by the Policy Subcommittee:

April 17, 2009

Asset Class Glossary: Total Fund
Policy: Leverage
April 17, 2009

Beta

A measure of the volatility, or systemic risk, of a security or a portfolio in comparison to the market as a whole.

Cash-Like Security

A fixed income security with a maturity of less than 91 days and a credit rating of A1/P1 or equivalent or higher.

Credit Accommodation

A guaranty executed by CalPERS whereby CalPERS agrees to pay the debt obligation of an entity, in the event the entity fails to pay the debt obligation. The entity will usually be a limited partnership or limited liability company, and will be majority-owned by CalPERS. The debt obligation that CalPERS guarantees will be evidenced by an extension of credit (e.g., loan, line of credit, or other form of credit facility) by a financial institution to the entity.

Currency

The monetary unit of a sovereign state.

Debt Service Coverage (DSC)

The annual net operating income divided by the annual debt service.

Delta of an Option

The ratio of a change in the value of an option to a change in the value of the underlying security for a small change in the value of the underlying security.

Derivative

An instrument whose value is based on the performance of an underlying financial asset, index, or other investment. Classes of derivatives include futures contracts, options, currency forward contracts, swaps and options on futures.

Direct Debt

A noncontingent financial obligation, including issued bonds, borrowed funds, and unsettled loss positions on non-exchange traded contracts.

Dollar Delta of an Option

The notional value of an option multiplied by the delta of the option.

General Pension Consultant

An individual or organization that provides specialized professional assistance to the Investment Committee in determining the pension fund's asset allocation model or optimal combination of investments in order to maximize risk-adjusted investment returns in a manner consistent with the State's long-term pension liabilities.

Leverage

The use of debt, derivative instruments, reinvestment of cash collateral, or other means to acquire more assets than the capital employed.

Liquidity

The ability to quickly convert a particular investment into cash at a low transaction cost.

Net Exposure

The sum of the market value of all long (positive) and short (negative) positions in non-cash-like securities plus the notional value of all long (positive) and short (negative) positions in futures, forward, and swap contracts plus the dollar delta of all options contracts. Net exposure includes lent securities.

Net exposure excludes non-cash collateral, collateral provided by the asset borrower for which gains or losses of the collateral are predominantly borne by the borrower.

Non-Cash-Like Security

A security that is not a cash-like security.

Non-recourse Debt

Financial obligation for which an investor has no current or contingent liability. Non-recourse debt includes the liabilities of a publicly traded company of which an investor owns shares and financial obligations of a partnership or a non-publicly traded company of which an investor is a limited liability investor. Non-recourse debt includes debt that is recourse only to a certain investment, such as a separate account or a commingled fund, and is non-recourse to CalPERS. For an investment with non-recourse debt, the maximum potential loss is limited to the amount of the investment.

Notional Leverage

Equal to the net exposure of a portfolio in excess of the portfolio market value.

Over-the-Counter (OTC)

The market for securities and traded products that are not listed on the major exchanges. OTC options are options with negotiated premium, strike price, and expiration date.

Recourse Debt

Amount of a debt guarantee; a financial liability contingent on the occurrence of an event such as borrower default or a certain decline in the equity value of an investment. Recourse debt includes letters of credit, lines of credit, Credit Accommodations, Subscription Financing, and other financing vehicles that serve as debt guarantees.

Risk Management

The process of defining, identifying, measuring, and managing risk.

Subscription Financing

A transaction in which a lender makes a loan to the separate account or the commingled fund, as the borrower, and the borrower transfers the right to call the capital commitment of CalPERS to the lender as security for the loan. CalPERS agrees to pay its capital commitment in cash to the lender if the borrower fails to pay the debt.

Swap

Private agreement between two companies to exchange cash flows in the future according to a prearranged formula.

Volatility

Expected or historical annualized standard deviation of returns. Returns can be total returns or the differential returns between a portfolio and its benchmark.